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09/177,815	10/23/1998	KYOUNG-SU KIM	1363.1004/MD	3622
21171 7590 05/15/2008 STAAS & HALSEY LLP SUITE 700 1201 NEW YORK AVENUE, N.W. WASHINGTON, DC 20005			EXAMINER	
			BROWN, RUEBEN M	
			ART UNIT	PAPER NUMBER
			2623	
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			05/15/2008	PAPER

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The time period for reply, if any, is set in the attached communication.

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## ADVISORY ACTION

## Response to Arguments

1. Applicant's arguments filed 4/11/2008 have been fully considered but they are not persuasive. Applicant's first argument found on page 7 is that the Office Action mailed 1/11/2008 did not address at least one of the features from claim 5, namely, 'a video encoder to encode, when the digital broadcasting channel is selected, the MPEG processed video signal and the additional information into an encoded analog signal according to a second control signal and of the plurality of control signals and the synchronous signal'. Examiner respectfully disagrees with this assertion.

In particular, page 8, 1<sup>st</sup> paragraph of the Office Action specifically addresses those limitations. The Office Action states, "The claimed video encoder for encoding processed MPEG video signal and the additional information into an encoded analog signal is met by the operation of the mixer 64 (which combines the MPEG video with additional data, col. 3, lines 44-47) and the NTSC encoder 80 (which creates an NTSC format analog video signal) col. 4, lines 18-23". The second control signal reads on the signal,  $K_d$  & 1- $K_d$  that are input to multipliers 62 & 68. The microprocessor 18 generates  $K_d$  & 1- $K_d$ , which control the amount of additional data that is overlayed on the MPEG processed data, see col. 3, lines 32-62, which was cited in the Office Action mailed 1/11/08.

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Applicant also argues on pages 8-9 that "Tessier sets forth using the sync with the analog locally generated signal within the same frame...Tessier fails to disclose or suggest that a sync from one input analog signal should be sued during the display of a different input signal.

Further Tessier fails to disclose or suggest that sync from one input analog signal should be used during the display of a different input digital signal". Applicant's assertions amount to a field of use argument. Since the point of Tessier is that, when any two signals are merged, e.g., two video signals or a video signal and additional data, such as graphics, there is the potential for the well-known problem of jitter. Thus, Tessier presents at least one solution for overcoming jitter whenever any two signals are combined, i.e., extracting a synchronous signal from one of the signals, and using that synchronous signal to ensure that the two instant combined signals are in sync.

Examiner also points out that there is no limitation in claim 5 that precludes the additional information being from a locally generated source. In fact, claim 5 merely recites, 'an additional information process unit to generate additional information according to a first control signal'. Thus claim 5 does not provide any requirements as to the source of the additional information.

As for the arguments with respect to claim 18, applicant first of all argues on page 10 that if Devaney is interpreted to meet the claimed, 'a tuning unit to selectively receive one of (1) a broadcasting signal, including a second digital broadcasting signal, after previously tuning & receiving a first analog broadcasting signal, and (2) a second analog broadcasting signal after

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tuning & receiving a first digital broadcasting signal', emphasis added; then a first analog or digital source would first be displayed and is then displayed together with another second digital or analog source, respectively. In the next paragraph applicant then asserts that because of this limitation in Devaney, "at no time would Devaney separately switch between two MPEG signals (one being an input digital signal & the other being an input analog signal converted to digital or switch between two analog signals (one being an input analog signal & the other being an input MPEG signal converted to an analog signal)".

Examiner's response is that no such limitation or requirement is recited in the claims.

Also, applicant on page 10 has interpreted Devaney to be limited to "any input analog signal is then converted to MPEG format and thereafter simultaneously displayed with another MPEG format signal or alternatively any input MEPG signals is first converted to an analog format signal and then thereafter simultaneously displayed with another analog format signal".

First of all, it is clear that Devaney enables switching between digital, i.e., MPEG broadcasting signals and analog broadcasting signals, see col. 4, lines 41-67; col. 7, lines 51-67 thru col. 8, lines 1-10; col. 9, lines 3-25; col. 10, lines 1-6 & Fig. 5. Furthermore, Devaney teaches that the display of the user's system may at least switch between a display of a plurality of programs simultaneously on the screen (i.e., Fig. 3), to one in which only a single program is displayed on the screen (i.e., Fig. 12), see col. 10, lines 1-8. Thus, examiner respectfully disagrees with applicant's characterization of Devaney as discussed in the previous paragraph.

Devaney enables switching between digital TV feeds Z1 and/or Z2 and the analog feeds Y1 and/or Y2. Devaney does not discuss any limitations on the sequence combinations, in other words, the user channel surfing may request and receive a stream comprised of digital – analog – digital - analog - digital, etc., for instance.

Likewise, examiner respectfully disagrees and does not find support in Devaney for applicant's assertion discussed above that in Devaney any input analog signal is then converted to MPEG and they are simultaneously displayed with another MPEG signal or alternatively, any MPEG signal is converted to analog and simultaneously displayed with another analog signal. Devaney teaches a subscriber channel surfing in order to request/receive/display programming streams that are digital and/or analog. The receiver decoder system 200 in Devaney clearly switches between requesting/receiving/displaying programming streams that alternates between digital and analog formats.

Applicant also argues that the jitter problem that is solved by Cummins is different from the 'jitter' recited in the claims. In particular, the claim recites, 'preventing jittering from occurring in output video upon the tuning unit changing selection between the first digital broadcasting signal and the second analog broadcasting signal or vice versa'. Examiner points that this is exactly the scenario that or environment in which Cummins seeks to operate. A review of Cummins, col. 1, lines 1-40; col. 3, lines 54-67 & col. 4, lines 45-58, shows that Cummins is directed to solving a problem that arises when an analog broadcasting signal is

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received by a digital system. Clearly, the problem of jitter in Cummins is not relevant when a digital broadcasting signal is selected and displayed by the digital system.

Thus applicant has arguments with respect to the discussion in Cummins that is the result of systems that displays video programming in digital format, but may also select/receive an analog broadcasting signal. The analog broadcasting signal at least has be converted to digital format by some form of an A/D conversion, which could potentially cause jitter, as was well known in the art and is discussed by Cummins. However, the overall environment is due to the fact that an analog broadcasting signal has been selected by a digital system.

In view of the above discussion, the Final Office Action mailed, 1/11/08 is maintained.

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"PROPOSED" or "DRAFT")

Any inquiry concerning this communication or earlier communications from the examiner should

be directed to Reuben M. Brown whose telephone number is (571) 272-7290. The examiner can normally

be reached on M-F (9:00-6:00), First Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor,

Christopher Kelley can be reached on (571) 272-7331. The fax phone numbers for the organization

where this application or proceeding is assigned is (571) 273-8300 for regular communications and After

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Reuben M. Brown